

set high off

SET COMMAND COMPLETED

=> s ink jet

55016 INK  
19825 INKS  
60901 INK  
(INK OR INKS)

83335 JET  
27825 JETS  
94753 JET  
(JET OR JETS)

L1 11646 INK JET  
(INK(W)JET)

=> set high on

SET COMMAND COMPLETED

=> s cationic(3a)resin

51335 CATIONIC  
679 CATIONICS  
51461 CATIONIC  
(CATIONIC OR CATIONICS)

270403 RESIN  
142296 RESINS  
304905 RESIN  
(RESIN OR RESINS)

L2 4179 CATIONIC(3A)RESIN

=> s (allylamine or diallylamine or diallyldimethylamine or (pas(w)(m(w)1 or a(w)1 or 410 or j(w)81 or 880 or a(w)5 or 92)))

2886 ALLYLAMINE  
216 ALLYLAMINES  
2981 ALLYLAMINE  
(ALLYLAMINE OR ALLYLAMINES)  
1101 DIALLYLAMINE  
91 DIALLYLAMINES  
1127 DIALLYLAMINE  
(DIALLYLAMINE OR DIALLYLAMINES)  
4 DIALLYLDIMETHYLAMINE  
3057 PAS  
245 PASES  
3301 PAS  
(PAS OR PASES)

666589 M

2415862 1

<-----User Break----->

u

SEARCH ENDED BY USER

=> s (allylamine or diallylamine or diallyldimethylamine or (pas(w)(m(w)1 or 410 or 880 or 92)))

2886 ALLYLAMINE

```

216 ALLYLAMINES
2981 ALLYLAMINE
      (ALLYLAMINE OR ALLYLAMINES)
1101 DIALLYLAMINE
  91 DIALLYLAMINES
1127 DIALLYLAMINE
      (DIALLYLAMINE OR DIALLYLAMINES)
  4 DIALLYLDIMETHYLAMINE
3057 PAS
 245 PASES
3301 PAS
      (PAS OR PASES)
666589 M
2415862 1
<-----User Break----->
u
SEARCH ENDED BY USER

=> s (allylamine or diallylamine or diallyldimethylamine or (pas)

UNMATCHED LEFT PARENTHESIS '(ALLYLAMINE'

=> s (allylamine or diallylamine or diallyldimethylamine or pas)

2886 ALLYLAMINE
  216 ALLYLAMINES
2981 ALLYLAMINE
      (ALLYLAMINE OR ALLYLAMINES)
1101 DIALLYLAMINE
  91 DIALLYLAMINES
1127 DIALLYLAMINE
      (DIALLYLAMINE OR DIALLYLAMINES)
  4 DIALLYLDIMETHYLAMINE
3057 PAS
 245 PASES
3301 PAS
      (PAS OR PASES)
L3      7046 (ALLYLAMINE OR DIALLYLAMINE OR DIALLYLDIMETHYLAMINE OR PAS)

=> s l1 and l2 and l3

L4      6 L1 AND L2 AND L3

s l3(p) (bleed or waterfastness or water resistance)

25927 BLEED
 4194 BLEEDS
28041 BLEED
      (BLEED OR BLEEDS)
  229 WATERFASTNESS
739904 WATER
 23087 WATERS
741316 WATER
      (WATER OR WATERS)
514080 RESISTANCE
 40062 RESISTANCES
519676 RESISTANCE
      (RESISTANCE OR RESISTANCES)
 10061 WATER RESISTANCE
      (WATER(W) RESISTANCE)
L5      12 L3(P) (BLEED OR WATERFASTNESS OR WATER RESISTANCE)

s l1 and l3

L9      81 L1 AND L3

```

=> s 19 and base

781680 BASE  
127832 BASES  
806563 BASE  
(BASE OR BASES)  
L10 48 L9 AND BASE

=> s 110 and anionic

60113 ANIONIC  
1016 ANIONICS  
60234 ANIONIC  
(ANIONIC OR ANIONICS)  
L11 22 L10 AND ANIONIC

s 19 and microjet

48 MICROJET  
27 MICROJETS  
62 MICROJET  
(MICROJET OR MICROJETS)  
L12 0 L9 AND MICROJET

=> s 19 and pigment(p)anionic

53154 PIGMENT  
67434 PIGMENTS  
91260 PIGMENT  
(PIGMENT OR PIGMENTS)  
60113 ANIONIC  
1016 ANIONICS  
60234 ANIONIC  
(ANIONIC OR ANIONICS)  
2031 PIGMENT(P)ANIONIC  
L13 8 L9 AND PIGMENT(P)ANIONIC

e diallylamine/cn

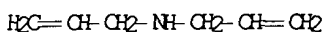
E1 1 DIALLYLALUMINUM CHLORIDE/CN  
E2 1 DIALLYLALUMINUM CHLORIDE, COMPD. WITH (C3H5)ALCL2/CN  
E3 1 --> DIALLYLAMINE/CN  
E4 1 DIALLYLAMINE BISULFITE/CN  
E5 1 DIALLYLAMINE HOMOPOLYMER/CN  
E6 1 DIALLYLAMINE HYDROCHLORIDE HOMOPOLYMER/CN  
E7 1 DIALLYLAMINE HYDROCHLORIDE POLYMER/CN  
E8 1 DIALLYLAMINE HYDROCHLORIDE-ACRYLAMIDE COPOLYMER/CN  
E9 1 DIALLYLAMINE HYDROCHLORIDE-DIALLYLDIMETHYLAMMONIUM  
CHLORIDE-  
SULFUR DIOXIDE COPOLYMER/CN  
E10 1 DIALLYLAMINE HYDROCHLORIDE-DIALLYLMETHYLAMINE  
HYDROCHLORIDE  
COPOLYMER/CN  
E11 1 DIALLYLAMINE HYDROCHLORIDE-EPICHLOROHYDRIN COPOLYMER/CN  
E12 1 DIALLYLAMINE HYDROCHLORIDE-SODIUM ETHENESULFONATE  
COPOLYMER/  
CN

=> s e3

L1 1 DIALLYLAMINE/CN

=> d 11

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 1999 ACS  
 RN 124-02-7 REGISTRY  
 CN 2-Propen-1-amine, N-2-propenyl- (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN \*Diallylamine (6CI, 8CI)\*  
 OTHER NAMES:  
 CN Di-2-propenylamine  
 FS 3D CONCORD  
 MF C6 H11 N  
 CI COM  
 LC STN Files: BEILSTEIN\*, BIOBUSINESS, BIOSIS, CA, CAOLD, CAPLUS,  
 CASREACT,  
 CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB,  
 DETHERM\*,  
 DIPPR\*, GMELIN\*, HODOC\*, HSDB\*, IFICDB, IFIPAT, IFIUDB, MRCK\*,  
 MSDS-OHS,  
 NIOSHTIC, PROMT, RTECS\*, SPECINFO, TOXLINE, TOXLIT, USPATFULL  
 (\*File contains numerically searchable property data)  
 Other Sources: DSL, EINECS, TSCA  
 (Enter CHEMLIST File for up-to-date regulatory information)



837 REFERENCES IN FILE CA (1967 TO DATE)  
 95 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 838 REFERENCES IN FILE CAPLUS (1967 TO DATE)  
 24 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> s e5 or e6 or e9

1 "DIALLYLAMINE HOMOPOLYMER"/CN  
 1 "DIALLYLAMINE HYDROCHLORIDE HOMOPOLYMER"/CN  
 1 "DIALLYLAMINE HYDROCHLORIDE-DIALLYLDIMETHYLAMMONIUM  
 CHLORIDE-SUL  
 FUR DIOXIDE COPOLYMER"/CN  
 L2 3 "DIALLYLAMINE HOMOPOLYMER"/CN OR "DIALLYLAMINE HYDROCHLORIDE  
 HOMOPOLYMER"/CN OR "DIALLYLAMINE  
 HYDROCHLORIDE-DIALLYLDIMETHYLAM  
 MONIUM CHLORIDE-SULFUR DIOXIDE COPOLYMER"/CN

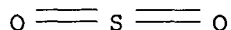
=> d 12 1-3

L2 ANSWER 1 OF 3 REGISTRY COPYRIGHT 1999 ACS  
 RN 72728-40-6 REGISTRY  
 CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with  
 N-2-propenyl-2-propen-1-amine hydrochloride and sulfur dioxide (9CI) (CA  
 INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN 2-Propen-1-amine, N-2-propenyl-, hydrochloride, polymer with  
 N,N-dimethyl-N-2-propenyl-2-propen-1-aminium chloride and sulfur dioxide  
 (9CI)  
 CN Sulfur dioxide, polymer with N,N-dimethyl-N-2-propenyl-2-propen-1-aminium  
 chloride and N-2-propenyl-2-propen-1-amine hydrochloride (9CI)  
 OTHER NAMES:  
 CN \*Diallylamine hydrochloride-diallyldimethylammonium chloride-sulfur\*  
 \*  
 dioxide copolymer\*  
 DR 143673-57-8  
 MF (C8 H16 N . C6 H11 N . Cl H . Cl . O2 S)x  
 CI PMS  
 PCT Polyamine, Polyionene, Polysulfone, Polysulfone formed, Polyvinyl

LC STN Files: CA, CAPLUS, USPATFULL

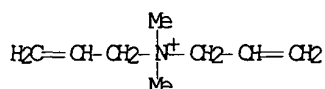
CM 1

CRN 7446-09-5  
CMF 02 S



CM 2

CRN 7398-69-8 (48042-45-1)  
CMF C8 H16 N . Cl



● Cl-

CM 3

CRN 6147-66-6 (124-02-7)  
CMF C6 H11 N . Cl H



● HCl

5 REFERENCES IN FILE CA (1967 TO DATE)  
5 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L2 ANSWER 2 OF 3 REGISTRY COPYRIGHT 1999 ACS  
RN 62238-80-6 REGISTRY  
CN 2-Propen-1-amine, N-2-propenyl-, homopolymer (9CI) (CA INDEX NAME)  
OTHER NAMES:  
CN **\*Diallylamine homopolymer\***  
CN Diallylamine polymer  
CN Poly(diallylamine)  
MF (C6 H11 N)x  
CI PMS, COM  
PCT Polyvinyl  
LC STN Files: CA, CAPLUS, CIN, IFICDB, IFIPAT, IFIUDB, PROMT, TOXLIT,  
USPATFULL

CM 1

CRN 124-02-7  
CMF C6 H11 N

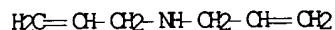


40 REFERENCES IN FILE CA (1967 TO DATE)  
18 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
40 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L2 ANSWER 3 OF 3 REGISTRY COPYRIGHT 1999 ACS  
RN 26063-69-4 REGISTRY  
CN 2-Propen-1-amine, N-2-propenyl-, hydrochloride, homopolymer (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Diallylamine, hydrochloride, polymers (8CI)  
OTHER NAMES:  
CN **\*Diallylamine hydrochloride homopolymer\***  
CN Diallylamine hydrochloride polymer  
CN Poly(diallylamine hydrochloride)  
CN Poly(diallylammonium chloride)  
MF (C6 H11 N . Cl H)x  
CI PMS, COM  
PCT Polyvinyl  
LC STN Files: CA, CAPLUS, IFICDB, IFIPAT, IFIUDB, TOXLIT, USPATFULL

CM 1

CRN 6147-66-6 (124-02-7)  
CMF C6 H11 N . Cl H



● HCl

49 REFERENCES IN FILE CA (1967 TO DATE)  
6 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
49 REFERENCES IN FILE CAPLUS (1967 TO DATE)

=> e pas-92/cn

E1	1	PAS 9826D/CN
E2	1	PAS FACTOR (VIBRIO ALGINOLYTICUS STRAIN NCIB 11038 CLONE
PAS		20)/CN
E3	0 -->	PAS-92/CN
E4	1	PAS-A/CN
E5	1	PAS-A 1/CN
E6	1	PAS-A 120/CN
E7	1	PAS-A 120L/CN
E8	1	PAS-A 120S/CN
E9	1	PAS-A 350/CN
E10	1	PAS-A 5/CN
E11	1	PAS-H 10/CN
E12	1	PAS-H 10L/CN

=> s e10

L3 1 "PAS-A 5"/CN

=> d 13

L3 ANSWER 1 OF 1 REGISTRY COPYRIGHT 1999 ACS  
RN 26470-16-6 REGISTRY  
CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with sulfur dioxide (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Ammonium, diallyldimethyl-, chloride, polymer with sulfur dioxide (8CI)  
 CN Sulfur dioxide, polymer with diallyldimethylammonium chloride (8CI)  
 CN Sulfur dioxide, polymer with N,N-dimethyl-N-2-propenyl-2-propen-1-aminium chloride (9CI)

OTHER NAMES:

CN Diallyldimethylammonium chloride-sulfur dioxide copolymer  
 CN Diallyldimethylammonium chloride-sulfur dioxide polymer  
 CN Dimethyldiallylammonium chloride-sulfur dioxide copolymer  
 CN Dimethyldiallylammonium chloride-sulfur dioxide polymer  
 CN N,N-Diallyl-N,N-dimethylammonium chloride-sulfur dioxide copolymer  
 CN PAS-A 120S  
 CN \*PAS-A 5\*  
 CN PAS-H 5  
 CN PAS-H 5L  
 DR 127963-86-4, 119574-34-4, 119574-35-5, 76429-34-0, 30137-28-1, 38702-38-4  
 MF (C8 H16 N . Cl . O2 S)x  
 CI PMS, COM  
 PCT Polyionene, Polysulfone, Polysulfone formed, Polyvinyl  
 LC STN Files: CA, CAPLUS, CHEMLIST, IFICDB, IFIPAT, IFIUDB, TOXLIT, USPATFULL  
 Other Sources: DSL, TSCA  
 (Enter CHEMLIST File for up-to-date regulatory information)

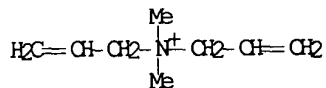
CM 1

CRN 7446-09-5  
 CMF O2 S

O = S = O

CM 2

CRN 7398-69-8 (48042-45-1)  
 CMF C8 H16 N . Cl



● Cl-

93 REFERENCES IN FILE CA (1967 TO DATE)  
 8 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 94 REFERENCES IN FILE CAPLUS (1967 TO DATE)

=> s pas-m/cn

L4 0 PAS-M/CN

=> e pas-m/cn

E1 1 PAS-J 41/CN  
 E2 1 PAS-J 81/CN  
 E3 0 --> PAS-M/CN  
 E4 1 PAS-M 1/CN

E5	1	PAS-O/CN
E6	1	PAS-TEBAMIN/CN
E7	1	PAS38TI/CN
E8	1	PASA/CN
E9	1	PASA 50/CN
E10	1	PASA 60-1/CN
E11	1	PASA 60-2/CN
E12	1	PASA-JELL 101/CN

=> s e2 or e4\

1 "PAS-J 81"/CN  
242 E4\  
(E4)

L5 243 "PAS-J 81"/CN OR E4\

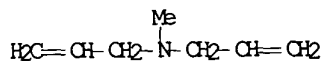
=> s e2 or e4

1 "PAS-J 81"/CN  
1 "PAS-M 1"/CN

L6 2 "PAS-J 81"/CN OR "PAS-M 1"/CN

=> d 16 1-2

L6 ANSWER 1 OF 2 REGISTRY COPYRIGHT 1999 ACS  
RN 29566-78-7 REGISTRY  
CN 2-Propen-1-amine, N-methyl-N-2-propenyl-, hydrochloride, homopolymer  
(9CI)  
(CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Diallylamine, N-methyl-, hydrochloride, polymers (8CI)  
OTHER NAMES:  
CN Diallylmethylamine hydrochloride homopolymer  
CN Methyldiallylamine hydrochloride polymer  
CN \*PAS-M 1\*  
CN Poly(methyldiallylamine hydrochloride)  
CN Poly(methyldiallylammonium chloride)  
MF (C7 H13 N . Cl H)x  
CI PMS, COM  
PCT Polyvinyl  
LC STN Files: CA, CAPLUS, CHEMLIST, CIN, IFICDB, IFIPAT, IFIUDB, TOXLIT,  
USPATFULL  
Other Sources: NDSL, TSCA  
(Enter CHEMLIST File for up-to-date regulatory information)  
  
CM 1  
  
CRN 13107-01-2 (2424-01-3)  
CMF C7 H13 N . Cl H



● HCl

29 REFERENCES IN FILE CA (1967 TO DATE)  
12 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
29 REFERENCES IN FILE CAPLUS (1967 TO DATE)

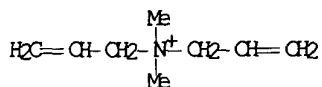


L6 ANSWER 2 OF 2 REGISTRY COPYRIGHT 1999 ACS  
 RN 26590-05-6 REGISTRY  
 CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with  
 2-propenamide (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN 2-Propenamide, polymer with N,N-dimethyl-N-2-propenyl-2-propen-1-aminium  
 chloride (9CI)  
 CN Acrylamide, polymer with diallyldimethylammonium chloride (8CI)  
 CN Ammonium, diallyldimethyl-, chloride, polymer with acrylamide (8CI)  
 OTHER NAMES:  
 CN 2-Propenamide-1,1-dimethyl-3,5-bis(methylene)piperidinium chloride  
 copolymer  
 CN Acrylamide-diallyldimethylammonium chloride copolymer  
 CN Acrylamide-diallyldimethylammonium chloride polymer  
 CN Acrylamide-dimethyldiallylammonium chloride copolymer  
 CN Acrylamide-dimethyldiallylammonium chloride polymer  
 CN Betz 2651  
 CN Diallyldimethylammonium chloride-acrylamide copolymer  
 CN Dimethyldiallylammonium chloride-acrylamide copolymer  
 CN E 949  
 CN Himacs SC 100  
 CN Hydraid 777  
 CN Kayacryl M-N  
 CN Kayacryl Resin M-N  
 CN Lipoflow MN  
 CN Mack K 007  
 CN Merquat 2200  
 CN Merquat 500  
 CN Merquat 550  
 CN Merquat S  
 CN Nalco 8105  
 CN PAS-J 11  
 CN PAS-J 41  
 CN \*PAS-J 81\*  
 CN Poly(acrylamide-dimethyldiallylammonium chloride)  
 CN Polyquaternium 7  
 CN Quaternium 41  
 CN WT 2575  
 CN WT 2640  
 CN WT 2860  
 CN WT 5504  
 CN XB 54-15-1  
 DR 60120-33-4, 61164-12-3, 61164-15-6, 108464-53-5, 66251-80-7, 136109-41-6,  
 147025-97-6, 152478-31-4, 118338-81-1  
 MF (C8 H16 N . C3 H5 N O . Cl)x  
 CI PMS, COM  
 PCT Polyacrylic, Polyvinyl  
 LC STN Files: BIOBUSINESS, CA, CAPLUS, CHEMCATS, CHEMLIST, CIN, CSCHEM,  
 IFICDB, IFIPAT, IFIUDB, MSDS-OHS, PROMT, TOXLIT, USPATFULL  
 Other Sources: DSL, TSCA  
 (Enter CHEMLIST File for up-to-date regulatory information)

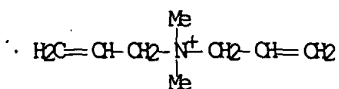
CM 1

CRN 7398-69-8 (48042-45-1)

CMF C8 H16 N . Cl



● Cl-

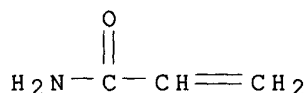


● Cl-

CM 2

CRN 79-06-1

CMF C3 H5 N O



488 REFERENCES IN FILE CA (1967 TO DATE)

25 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

491 REFERENCES IN FILE CAPLUS (1967 TO DATE)

=> e diallyldimethylamine/cn

E1	1	DIALLYLDIHYDROXYDIPHENYLPROPANE/CN
E2	1	DIALLYLDIISOPROPYLSILANE/CN
E3	0 -->	DIALLYLDIMETHYLAMINE/CN
E4	1	DIALLYLDIMETHYLAMMONIUM/CN
E5	1	DIALLYLDIMETHYLAMMONIUM BROMIDE/CN
E6	1	DIALLYLDIMETHYLAMMONIUM BROMIDE HOMOPOLYMER/CN
E7	1	DIALLYLDIMETHYLAMMONIUM BROMIDE HOMOPOLYMER-SODIUM DODECYL
S		ULFATE COMPLEX/CN
E8	1	DIALLYLDIMETHYLAMMONIUM
		BROMIDE-DIALLYLDODECYLMETHYLAMMONIUM
		BROMIDE COPOLYMER/CN
E9	1	DIALLYLDIMETHYLAMMONIUM
		BROMIDE-N,N'-METHYLENEBISACRYLAMIDE
		COPOLYMER/CN
E10	1	DIALLYLDIMETHYLAMMONIUM BROMIDE-N-VINYLETAMIDE
		COPOLYMER/C
		N
E11	1	DIALLYLDIMETHYLAMMONIUM CHLORIDE/CN
E12	1	DIALLYLDIMETHYLAMMONIUM CHLORIDE HOMOPOLYMER/CN

=> e diallyldiethylamine/cn

E1	1	DIALLYLDIDODECYLAMMONIUM BROMIDE/CN
E2	1	DIALLYLDIDODECYLAMMONIUM CHLORIDE/CN
E3	0 -->	DIALLYLDIETHYLAMINE/CN
E4	1	DIALLYLDIETHYLAMMONIUM BROMIDE/CN
E5	1	DIALLYLDIETHYLAMMONIUM CHLORIDE/CN
E6	1	DIALLYLDIETHYLAMMONIUM CHLORIDE POLYMER WITH ACRYLAMIDE/CN
E7	1	DIALLYLDIETHYLAMMONIUM CHLORIDE-2-HYDROXYETHYL
		METHACRYLATE
		POLYMER/CN
E8	1	DIALLYLDIETHYLAMMONIUM CHLORIDE-ACRYLAMIDE-POTASSIUM
		ACRYLAT
		E-DIALLYLDIMETHYLAMMONIUM CHLORIDE POLYMER/CN
E9	1	DIALLYLDIETHYLAMMONIUM
		CHLORIDE-DIALLYL(3-FORMYL-4-HYDROXY)B

E10	1	NZYL)METHYLAMMONIUM CHLORIDE POLYMER/CN
KETONE-VINYLLIDE		DIALLYLDIETHYLAMMONIUM CHLORIDE-METHYL VINYL
E11	1	NE CHLORIDE COPOLYMER/CN
KETONE-VINYLLIDE		DIALLYLDIETHYLAMMONIUM CHLORIDE-METHYL VINYL
E12	1	NE CHLORIDE POLYMER/CN
COPOLYMER/C		DIALLYLDIETHYLAMMONIUM CHLORIDE-N-VINYLACETAMIDE
		N

=> e siallyldimethylamine hydrochloride-sulfur dioxide copolymer/cn

E1	1	SIALIN/CN
E2	1	SIALON EMULSIFIER/CN
E3	0 -->	SIALLYLDIMETHYLAMINE HYDROCHLORIDE-SULFUR DIOXIDE
COPOLYMER/		CN
E4	1	SIALOADHESIN (MOUSE CLONE .LAMBDA.15 GENE SN)/CN
E5	1	SIALOADHESIN (MOUSE STRAIN C57BL/6 MACROPHAGE 16-DOMAIN
FORM		)/CN
E6	1	SIALOADHESIN (MOUSE STRAIN C57BL/6 MACROPHAGE 3-DOMAIN
FORM)		/CN
E7	1	SIALOADHESIN (MOUSE STRAIN C57BL/6 MACROPHAGE CLONE
PGN6)/CN		
E8	1	SIALOADHESIN SAF-3 (SIALOADHESIN FAMILY MEMBER-3) (HUMAN
374		-AMINO ACID ISOFORM)/CN
E9	1	SIALOADHESIN SAF-3 (SIALOADHESIN FAMILY MEMBER-3) (HUMAN
467		-AMINO ACID ISOFORM)/CN
E10	1	SIALOADHESIN SAF-4 (SIALOADHESIN FAMILY 4) (HUMAN
399-AMINO		ACID ISOFORM)/CN
E11	1	SIALOADHESIN SAF-4 (SIALOADHESIN FAMILY 4) (HUMAN
639-AMINO		ACID ISOFORM)/CN
E12	1	SIALOGASTRONE/CN

=> e diallyldimethylamine hydrochloride-sulfur dioxide copolymer/cn

E1	1	DIALLYLDIHYDROXYDIPHENYLPROPANE/CN
E2	1	DIALLYLDIISOPROPYLSILANE/CN
E3	0 -->	DIALLYLDIMETHYLAMINE HYDROCHLORIDE-SULFUR DIOXIDE
COPOLYMER/		CN
E4	1	DIALLYLDIMETHYLAMMONIUM/CN
E5	1	DIALLYLDIMETHYLAMMONIUM BROMIDE/CN
E6	1	DIALLYLDIMETHYLAMMONIUM BROMIDE HOMOPOLYMER/CN
E7	1	DIALLYLDIMETHYLAMMONIUM BROMIDE HOMOPOLYMER-SODIUM DODECYL
S		ULFATE COMPLEX/CN
E8	1	DIALLYLDIMETHYLAMMONIUM
BROMIDE-DIALLYLDODECYLMETHYLAMMONIUM		BROMIDE COPOLYMER/CN
E9	1	DIALLYLDIMETHYLAMMONIUM
BROMIDE-N,N'-METHYLENEBISACRYLAMIDE		COPOLYMER/CN
E10	1	DIALLYLDIMETHYLAMMONIUM BROMIDE-N-VINYLACETAMIDE
COPOLYMER/C		N
E11	1	DIALLYLDIMETHYLAMMONIUM CHLORIDE/CN
E12	1	DIALLYLDIMETHYLAMMONIUM CHLORIDE HOMOPOLYMER/CN

s jp63299971/pn

L6 1 JP63299971/PN  
(JP63299971/PN)

=> d 16 ab,bib

L6 ANSWER 1 OF 1 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD

AB JP63299971 A UPAB: 930923

Ink jet recording method is effected by (i) applying colourless or light-coloured liq. contg. an organic cpd. having at least a cationic gp. in the molecule onto a recording material, (ii) then applying ink contg. an anionic dye onto the part applied with the pre-treating liq..

The colourless or light-coloured liquid contains wetting agent. Wetting agent is nonionic surfactant, anionic surfactant, cationic surfactant and/or fluorine-contained surfactant. The liquid contains polyhydric alcohol. PH of the liquid is 5-14. Surface tension of the ink is at most 50 dyne/cm. The anionic dye has -SO<sub>3</sub><sup>-</sup>, -COO<sup>-</sup> or -O<sup>-</sup> as acidic group in the molecule. (Not claimed) Application amount of the cationic compound is 1/10-100 equivalent amount (more pref. 1/2 - 10 equivalent amount) of the anionic dye.

ADVANTAGE - Improves drying property, water resistance, light resistance, image contrast, and prevents ink nozzle blockage.

0/7

AN 89-027442 [04] WPIDS

DNN N89-020836 DNC C89-011919

TI Ink jet recording method - involves pretreating material with colourless organic cpd. contg. cationic gp(s), then applying ink contg. anionic dye.

DC G05 P75

PA (RICO) RICOH KK

CYC 1

PI JP 63299971 A 881207 (8904)\* 15 pp <--

JP 2667401 B2 971027 (9748) 13 pp

ADT JP 63299971 A JP 87-133442 870530; JP 2667401 B2 JP 87-133442 870530

FDT JP 2667401 B2 Previous Publ. JP 63299971

PRAI JP 87-133442 870530

=> s jp01081868/pn

L7 1 JP01081868/PN

=> d 17

L7 ANSWER 1 OF 1 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD

AN 89-135574 [18] WPIDS

DNC C89-060201

TI Recording liq. for ink jet printing - comprises water-soluble dye, aq. medium and pyridazinium polymer.

DC A97 G02

PA (MITU) MITSUBISHI CHEM IND LTD

CYC 1

PI JP 01081868 A 890328 (8918)\* 5 pp <--

JP 08009701 B2 960131 (9609) 5 pp C09D011-00

ADT JP 01081868 A JP 87-237937 870922; JP 08009701 B2 JP 87-237937 870922

FDT JP 08009701 B2 Based on JP 01081868

PRAI JP 87-237937 870922

IC C09D011-00

ICM C09D011-00

=> d 17 ab,in

L7 ANSWER 1 OF 1 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD  
AB JP01081868 A UPAB: 930923  
Recording liq. comprises water-soluble dye, aq. medium and cpd. of  
formula

(I). In the formula, R1 = H or (un)substd. alkyl gp.; R2 = (un)substd.  
alkyl gp.; X- = anion; and n = 100-5,000.

Content of the cpd. in the liq. is pref. 0.5-20 wt%. Pref. also liq.  
contains surfactant and has pH 6-8. Liq. pref. contains cpd. of urea,  
thiourea, biuret or semicarbazide.

ADVANTAGE - The liq. has fast drying property and gives high quality  
record copies. Even when the liq. is applied to normal letter paper, no  
spreading of record image due to the rubbing takes place and sharp and  
clear prints are obtd. The liq. has good recording properties e.g.  
response against pulse, stable ink drop forming, ink jet stability and  
continuous workability, and shelf stability, and forms record with  
resistance to light, weather and water.

0/0

=> s jp08207421/pn

L8 1 JP08207421/PN

=> d l8

L8 ANSWER 1 OF 1 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD

AN 96-421048 [42] WPIDS

DNN N96-355028 DNC C96-132185

TI Liq. compsn. giving images of good density, high quality and anchorage  
properties - contains cationic material comprising mono atomic alcohol  
and/or para oxy benzoic ester.

DC E14 E17 G05 P75

PA (CANO) CANON KK

CYC 1

PI JP 08207421 A 960813 (9642)\* 14 pp B41M005-00 <--

ADT JP 08207421 A JP 95-32894 950131

PRAI JP 95-32894 950131

IC ICM B41M005-00

ICS B41J002-01; C09D011-00; D06P005-00

=> d l8 bib

L8 ANSWER 1 OF 1 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD

AN 96-421048 [42] WPIDS

DNN N96-355028 DNC C96-132185

TI Liq. compsn. giving images of good density, high quality and anchorage  
properties - contains cationic material comprising mono atomic alcohol  
and/or para oxy benzoic ester.

DC E14 E17 G05 P75

PA (CANO) CANON KK

CYC 1

PI JP 08207421 A 960813 (9642)\* 14 pp <--

ADT JP 08207421 A JP 95-32894 950131

PRAI JP 95-32894 950131

=> d l8 ab

L8 ANSWER 1 OF 1 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD

AB JP08207421 A UPAB: 961021

The liq. compsn. contg. at least cationic material comprises monoatomic

alcohol and/or p-oxy benzoic ester.

Also claimed is an image forming method having a step (A) to adhere the liq. compsn. onto or near image forming areas on a recording medium and a step (B) to adhere the ink contg. pigment dispersion with at least anionic gp. to the recording medium as liq. drops from an orifice according to recording signals.

Pref. the cationic material has the peak of the mol. wt. distribution

in the range of less than 1000 and in the range 1500 to 10000 and is composed of at least two cpds. At least one of them is a surfactant. The monoatomic alcohol is either isopropyl alcohol or ethanol.

ADVANTAGE - The liq. compsn. can form images with sufficient density, high quality and anchorage properties at high speed. Obtd. images can have good abrasion resistance.  
Dwg.1/9

=> s jp08269375/pn

L9 1 JP08269375/PN

=> d 19 ab,bib,in

L9 ANSWER 1 OF 1 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD

AB JP08269375 A UPAB: 961219

Aq. dispersion type ink jet ink (P) contains at least water (A), water-soluble organic solvent (B) having a lower vapour pressure than water, and colouring material (C) soluble in (B), comprising salt of direct dye or/and acid dye (C1) and water-soluble cationic cpd. (C2) having a molecular wt. (in case of polymer, at wt. average molecular wt.) of 300-25,000 and (C) has been dispersed in a medium consisting of (A)

and

(B). Also claimed is prodn. of (P) (M) comprising: (1) dissolving (C) in (B); and (2) mixing soln. obtd. in (1) with either (A) or a soln. contg. at least (1), to obtain (P).

USE - (P) is used for ink jet recording. (M) is used for mfg. (P).

ADVANTAGE - (P) has excellent storage stability and discharge and gives high quality printings with no bleeding and excellent resistance to rubbing and water even on plain or reclaimed paper.

Dwg.0/0

AN 96-515210 [51] WPIDS

DNN N96-434424 DNC C96-161509

TI Aq. dispersion type ink jet ink - contains water, water-soluble organic solvent and colouring material soluble in solvent, for high quality painting without bleeding.

DC A97 G02 T04

PA (SHIH) SEIKO EPSON CORP

CYC 1

PI JP 08269375 A 961015 (9651)\* 14 pp <--

ADT JP 08269375 A JP 95-77636 950403

PRAI JP 95-77636 950403

s ink jet

11 FILES SEARCHED...

L12 47840 INK JET

=> s cationic(3a)resin

L13 8959 CATIONIC(3A) RESIN

=> s (allylamine or diallylamine or polyallylamine or diallyldimethylamine or pas)

L14            27952 (ALLYLAMINE OR DIALLYLAMINE OR POLYALLYLAMINE OR DIALLYLDIMETHYL AMINE OR PAS)

=> s 112 and 113 and 114

L15            26 L12 AND L13 AND L14

=> d 115 1-13 kwic

L15    ANSWER 1 OF 26    CAPLUS    COPYRIGHT 1999 ACS

L15    ANSWER 2 OF 26    CAPLUS    COPYRIGHT 1999 ACS

L15    ANSWER 3 OF 26    CAPLUS    COPYRIGHT 1999 ACS

L15    ANSWER 4 OF 26    CAPLUS    COPYRIGHT 1999 ACS

L15    ANSWER 5 OF 26    CAPLUS    COPYRIGHT 1999 ACS

L15    ANSWER 6 OF 26    CAPLUS    COPYRIGHT 1999 ACS

L15    ANSWER 7 OF 26    CAPLUS    COPYRIGHT 1999 ACS

L15    ANSWER 8 OF 26    CAPLUS    COPYRIGHT 1999 ACS

L15    ANSWER 9 OF 26    CAPLUS    COPYRIGHT 1999 ACS

L15    ANSWER 10 OF 26    CAPLUS    COPYRIGHT 1999 ACS

L15    ANSWER 11 OF 26    CAPLUS    COPYRIGHT 1999 ACS

L15    ANSWER 12 OF 26    CAPLUS    COPYRIGHT 1999 ACS

L15    ANSWER 13 OF 26    USPATFULL

=> set high on

SET COMMAND COMPLETED

=> s cationic(3a)resin

L16            8959 CATIONIC(3A) RESIN

=> s (allylamine or diallylamine or polyallylamine or diallyldimethylamine or pas)

L17            27952 (ALLYLAMINE OR DIALLYLAMINE OR POLYALLYLAMINE OR DIALLYLDIMETHYL AMINE OR PAS)

=> s 112 and 116 and 117

L18            26 L12 AND L16 AND L17

s 117(p) (waterfastness or water resistance or bleed)

PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH  
FIELD CODE - 'AND' OPERATOR ASSUMED 'L83(P) (WATERFAST'  
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH  
<-----User Break----->  
u  
SEARCH ENDED BY USER

=> s 117(30a) (waterfastness or water resistance or bleed)

12 FILES SEARCHED...

L19 33 L17 (30A) (WATERFASTNESS OR WATER RESISTANCE OR BLEED)

=> s 119 and 112

L20 21 L19 AND L12

s (ink or pigment or dye) (w) set

11 FILES SEARCHED...

L23 762 (INK OR PIGMENT OR DYE) (W) SET

=> s 123 and 117

L24 32 L23 AND L17

=> s 124 and (polyacrlamide or polyvinylpyrrolidone or polyvinyl alcohol or  
polyhydroxymethyl methacarylate or water(w) soluble(w) resin)  
<-----User Break----->  
u  
SEARCH ENDED BY USER

=> s 124 and (polyacrylamide or polyvinylpyrrolidone or polyvinyl alcohol or  
polyhydroxymethyl methacarylate or water(w) soluble(w) resin)

10 FILES SEARCHED...

L25 16 L24 AND (POLYACRYLAMIDE OR POLYVINYLPIRROLIDONE OR POLYVINYL  
ALCOHOL OR POLYHYDROXYMETHYL METHACARYLATE OR WATER(W)  
SOLUBLE (W  
) RESIN)

=> s 125 and (anionic(3a) resin or cellulose or polyacrylic acid or  
polymethacrylic acid or styrene(3a) acrylic acid)

6 FILES SEARCHED...  
12 FILES SEARCHED...

L26 7 L25 AND (ANIONIC(3A) RESIN OR CELLULOSE OR POLYACRYLIC ACID OR  
POLYMETHACRYLIC ACID OR STYRENE(3A) ACRYLIC ACID)

s acid red 249

L27 146 ACID RED 249

=> s 127 and 117

L



s 123 and direct black and direct yellow and direct blue and direct red

L29            10 L23 AND DIRECT BLACK AND DIRECT YELLOW AND DIRECT BLUE AND  
                 DIRECT RED

=> s acid red and acid yellow and acid blue

11 FILES SEARCHED...

L30            915 ACID RED AND ACID YELLOW AND ACID BLUE

=> s 129 and 130

L31            10 L29 AND L30

=> s 131 and food black

L32            5 L31 AND FOOD BLACK

s cationic(3a)resin and anionic(3a)resin and water(w)soluble(w)resin

51335 CATIONIC  
679 CATIONICS  
51461 CATIONIC  
          (CATIONIC OR CATIONICS)  
270403 RESIN  
142296 RESINS  
304905 RESIN  
          (RESIN OR RESINS)  
4179 CATIONIC(3A)RESIN  
60113 ANIONIC  
1016 ANIONICS  
60234 ANIONIC  
          (ANIONIC OR ANIONICS)  
270403 RESIN  
142296 RESINS  
304905 RESIN  
          (RESIN OR RESINS)  
2277 ANIONIC(3A)RESIN  
739904 WATER  
23087 WATERS  
741316 WATER  
          (WATER OR WATERS)  
218237 SOLUBLE  
3121 SOLUBLES  
219058 SOLUBLE  
          (SOLUBLE OR SOLUBLES)  
270403 RESIN  
142296 RESINS  
304905 RESIN  
          (RESIN OR RESINS)  
2400 WATER(W) SOLUBLE (W) RESIN

L1            47 CATIONIC(3A)RESIN AND ANIONIC(3A)RESIN AND WATER(W) SOLUBLE (  
W)R

s (lithium or sodium or potassium or barium or calcium) (5a)hydroxide

91781 LITHIUM  
346 LITHIUMS  
91796 LITHIUM  
          (LITHIUM OR LITHIUMS)

322282 SODIUM  
     61 SODIUMS  
 322287 SODIUM  
     (SODIUM OR SODIUMS)  
 199211 POTASSIUM  
     30 POTASSIUMS  
 199214 POTASSIUM  
     (POTASSIUM OR POTASSIUMS)  
 57129 BARIUM  
     11 BARIUMS  
 57134 BARIUM  
     (BARIUM OR BARIUMS)  
 174128 CALCIUM  
     44 CALCIUMS  
 174130 CALCIUM  
     (CALCIUM OR CALCIUMS)  
 186393 HYDROXIDE  
 42243 HYDROXIDES  
 194597 HYDROXIDE  
     (HYDROXIDE OR HYDROXIDES)

COMMAND INTERRUPTED

=> s (lithium or potassium or barium or calcium) (5a)hydroxide

91781 LITHIUM  
     346 LITHIUMS  
 91796 LITHIUM  
     (LITHIUM OR LITHIUMS)  
 199211 POTASSIUM  
     30 POTASSIUMS  
 199214 POTASSIUM  
     (POTASSIUM OR POTASSIUMS)  
 57129 BARIUM  
     11 BARIUMS  
 57134 BARIUM  
     (BARIUM OR BARIUMS)  
 174128 CALCIUM  
     44 CALCIUMS  
 174130 CALCIUM  
     (CALCIUM OR CALCIUMS)  
 186393 HYDROXIDE  
 42243 HYDROXIDES  
 194597 HYDROXIDE  
     (HYDROXIDE OR HYDROXIDES)

L2       87563 (LITHIUM OR POTASSIUM OR BARIUM OR CALCIUM) (5A)HYDROXIDE

=> s (polyacrylamide or polyvinylpyrrolidone or polyvinyl alcohol or polyvinyl acetate or polyhydroxymethyl methacrylate)

27624 POLYACRYLAMIDE  
     5248 POLYACRYLAMIDES  
 30690 POLYACRYLAMIDE  
     (POLYACRYLAMIDE OR POLYACRYLAMIDES)  
 20692 POLYVINYLPIRROLIDONE  
     902 POLYVINYLPIRROLIDONES  
 21214 POLYVINYLPIRROLIDONE  
     (POLYVINYLPIRROLIDONE OR POLYVINYLPIRROLIDONES)  
 114815 POLYVINYL  
     801 POLYVINYL  
 115182 POLYVINYL  
     (POLYVINYL OR POLYVINYL)  
 233150 ALCOHOL  
 139243 ALCOHOLS  
 268212 ALCOHOL

(ALCOHOL OR ALCOHOLS)  
 46371 POLYVINYL ALCOHOL  
 (POLYVINYL (W) ALCOHOL)  
 114815 POLYVINYL  
 801 POLYVINYL  
 115182 POLYVINYL  
 (POLYVINYL OR POLYVINYL)  
 226515 ACETATE  
 21585 ACETATES  
 231521 ACETATE  
 (ACETATE OR ACETATES)  
 21187 POLYVINYL ACETATE  
 (POLYVINYL (W) ACETATE)  
 51 POLYHYDROXYMETHYL  
 65848 METHACRYLATE  
 18150 METHACRYLATES  
 69641 METHACRYLATE  
 (METHACRYLATE OR METHACRYLATES)  
 13 POLYHYDROXYMETHYL METHACRYLATE  
 (POLYHYDROXYMETHYL (W) METHACRYLATE)

COMMAND INTERRUPTED

YOU HAVE RECEIVED THIS ERROR MESSAGE 2 CONSECUTIVE TIMES

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 contact your Help Desk.

IF YOU REQUIRE FURTHER HELP, PLEASE CONTACT YOUR LOCAL HELP DESK

=> s (polyacrylamide or polyvinylpyrrolidone or polyvinyl alcohol or  
 polyhydroxymethyl methacrylate)

27624 POLYACRYLAMIDE  
 5248 POLYACRYLAMIDES  
 30690 POLYACRYLAMIDE  
 (POLYACRYLAMIDE OR POLYACRYLAMIDES)  
 20692 POLYVINYLPIRROLIDONE  
 902 POLYVINYLPIRROLIDONES  
 21214 POLYVINYLPIRROLIDONE  
 (POLYVINYLPIRROLIDONE OR POLYVINYLPIRROLIDONES)  
 114815 POLYVINYL  
 801 POLYVINYL  
 115182 POLYVINYL  
 (POLYVINYL OR POLYVINYL)  
 233150 ALCOHOL  
 139243 ALCOHOLS  
 268212 ALCOHOL  
 (ALCOHOL OR ALCOHOLS)  
 46371 POLYVINYL ALCOHOL  
 (POLYVINYL (W) ALCOHOL)  
 51 POLYHYDROXYMETHYL  
 65848 METHACRYLATE  
 18150 METHACRYLATES  
 69641 METHACRYLATE  
 (METHACRYLATE OR METHACRYLATES)  
 13 POLYHYDROXYMETHYL METHACRYLATE  
 (POLYHYDROXYMETHYL (W) METHACRYLATE)

L3 82687 (POLYACRYLAMIDE OR POLYVINYLPIRROLIDONE OR POLYVINYL ALCOHO

L

OR POLYHYDROXYMETHYL METHACRYLATE)

=> s cellulose or polyacrylic acid or styrene(3a)acrylic acid

129039 CELLULOSE  
 4699 CELLULOSES  
 130041 CELLULOSE  
 (CELLULOSE OR CELLULOSES)  
 19591 POLYACRYLIC

968 POLYACRYLICS  
20328 POLYACRYLIC  
(POLYACRYLIC OR POLYACRYLICS)  
452723 ACID  
252496 ACIDS  
464961 ACID  
(ACID OR ACIDS)  
15682 POLYACRYLIC ACID  
(POLYACRYLIC (W) ACID)  
100559 STYRENE  
7504 STYRENES  
101366 STYRENE  
(STYRENE OR STYRENES)  
113231 ACRYLIC  
7394 ACRYLICS  
116168 ACRYLIC  
(ACRYLIC OR ACRYLICS)  
452723 ACID  
252496 ACIDS  
464961 ACID  
(ACID OR ACIDS)  
56788 ACRYLIC ACID  
(ACRYLIC (W) ACID)  
5942 STYRENE (3A) ACRYLIC ACID

L4 138883 CELLULOSE OR POLYACRYLIC ACID OR STYRENE (3A) ACRYLIC ACID

=> s cationic(3a)resin

51335 CATIONIC  
679 CATIONICS  
51461 CATIONIC  
(CATIONIC OR CATIONICS)  
270403 RESIN  
142296 RESINS  
304905 RESIN  
(RESIN OR RESINS)

L5 4179 CATIONIC (3A) RESIN

Trying 11180...Open

PLEASE ENTER HOST PORT ID:  
PLEASE ENTER HOST PORT ID:x  
LOGINID:dl7eces  
PASSWORD:

\* \* \* \* \* RECONNECTED TO U.S. Patent & Trademark Office \* \* \* \* \*  
SESSION RESUMED IN FILE 'USPAT' AT 14:27:20 ON 24 FEB 1999  
FILE 'USPAT' ENTERED AT 14:27:20 ON 24 FEB 1999  
=> s 12 and 15 and 13

L6 173 L2 AND L5 AND L3

=> set high off

SET COMMAND COMPLETED

=> s ink

55016 INK  
19825 INKS

L7 60901 INK  
(INK OR INKS)

=> set high on

SET COMMAND COMPLETED

=> s 16 and 17

L8 48 L6 AND L7

s 18 and ?allylamine

4291 ?ALLYLAMINE

L9 9 L8 AND ?ALLYLAMINE

s ?allylamine? or diallyldimethyl ammonium chloride or pas

4404 ?ALLYLAMINE?

305 DIALLYLDIMETHYL

173212 AMMONIUM

366 AMMONIUMS

173247 AMMONIUM

(AMMONIUM OR AMMONIUMS)

319819 CHLORIDE

42220 CHLORIDES

326008 CHLORIDE

(CHLORIDE OR CHLORIDES)

277 DIALLYLDIMETHYL AMMONIUM CHLORIDE

(DIALLYLDIMETHYL (W) AMMONIUM (W) CHLORIDE)

3057 PAS

245 PASES

3301 PAS

(PAS OR PASES)

L10 7930 ?ALLYLAMINE? OR DIALLYLDIMETHYL AMMONIUM CHLORIDE OR PAS

s 110(5a)(equation or structure or formula)

163012 EQUATION

75041 EQUATIONS

183283 EQUATION

(EQUATION OR EQUATIONS)

978470 STRUCTURE

335067 STRUCTURES

1043404 STRUCTURE

(STRUCTURE OR STRUCTURES)

317147 FORMULA

51018 FORMULAS

59464 FORMULAE

329853 FORMULA

(FORMULA OR FORMULAS OR FORMULAE)

L11 252 L10(5A) (EQUATION OR STRUCTURE OR FORMULA)

=> s 111 and 17

L12 37 L11 AND L7